

Topic: Determine the possible role of galactic cosmic ray particles as a source for cloud condensation nuclei in the troposphere and lower stratosphere.

Project Title:

The Effects of Solar Activity on the Middle and Low-Latitude Ionosphere

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Project Information:

This proposed work will use existing multi-year satellite observations of ionospheric density, middle and upper atmosphere temperatures and a 3D nonlinear general circulation model to address the following outstanding science questions:

1. What are the relative inter-annual and solar cycle effects on the mid- and low-latitude ionosphere?
2. How far do solar rotational effects penetrate in the mid- and low-latitude ionosphere?
3. What are the quantitative effects of flares on ionospheric heating?

ROSES ID: NNH08ZDA001N

Duration:

Selection Year: 2009

Program Element: Focused Science Topic

Citations: